the transmission **22** to the front wheels **7**. The rear axle **24** transmits the power that is input from the transmission **22** to the rear wheels **8**.

**[0044]** As illustrated in FIG. **3**, the tractor **1** includes the control unit **4**. The control unit **4** is configured as an ordinary computer and includes an illustration-omitted arithmetic device such as a CPU, a storage device such as a non-volatile memory, an input-output unit, etc. The storage device stores various kinds of programs, data related to the control of the tractor **1**, etc. The arithmetic device is capable of reading various kinds of programs from the storage device and executing the programs. By the cooperation of the above-described hardware and software, the control unit **4** can be operated as a travel control unit **4***a* and a work machine control unit **4***b*. The travel control unit **4***a* controls the traveling (forward traveling, reverse traveling, stopping, turning, etc.) of the travel machine body **2**. The work machine control unit **4***b* controls the operation (raising/lowering, driving, stopping, etc.) of the work machine **3**. Note that the control unit **4** can also perform controls other than the above (for example, analysis of captured images, etc.). Further, the control unit **4** can be configured with one computer or configured with multiple computers.

**[0045]** The travel control unit **4***a* performs vehicle speed control for controlling the vehicle speed of the tractor **1** and steering control for steering the tractor **1**. In a case of controlling the vehicle speed, the control unit **4** controls at least one of the rotation speed of the engine **10** and the gear ratio of the transmission **22**.

**[0046]** Specifically, the engine **10** is provided with a governor device **41** including an illustration-omitted actuator for changing the rotation speed of the engine **10**. The travel control unit **4***a* is capable of controlling the rotation speed of the engine **10** by controlling the governor device **41**. Further, the fuel injection device **45** for adjusting the injection timing and injection amount of fuel to be injected (supplied) into the combustion chamber of the engine **10** is installed in the engine **10**. By controlling the fuel injection device **45**, the travel control unit **4***a* is capable of stopping the supply of fuel to the engine **10** and stopping the driving of the engine **10**, for example.

**[0047]** Further, the transmission **22** is provided with the transmission device **42**, which is a hydraulic continuously-variable transmission device with a movable swash plate, for example. The travel control unit **4***a* changes the gear ratio of the transmission **22** by changing the angle of the swash plate of the transmission device **42** by use of an illustration-omitted actuator. By performing the above processing, the tractor **1** is changed to a target vehicle speed.

**[0048]** In a case of performing the steering control, the travel control unit **4***a* controls the rotation angle of the steering handle **12**. Specifically, the steering actuator **43** is disposed in the middle part of the rotation shaft (steering shaft) of the steering handle **12**. With this configuration, in a case where the tractor **1** travels on a predetermined path, the control unit **4** calculates an appropriate rotation angle of the steering handle **12** so that the tractor **1** travels along the path and controls the rotation angle of the steering handle **12** to the obtained rotation angle by driving the steering actuator **43**.

**[0049]** The work machine control unit **4***b* switches between driving and stopping of the work machine **3** by controlling the PTO switch **17**, based on whether or not a work execution condition is satisfied. Further, the work machine control unit **4***b* controls raising and lowering of the work machine **3**. Specifically, the tractor **1** is provided with the raising-lowering actuator **44**, which is configured with a hydraulic cylinder, etc., in the vicinity of a three-point link mechanism that connects the work machine **3** to the travel machine body **2**. The work machine control unit **4***b* drives the raising-lowering actuator **44** to cause the work machine **3** to perform a raising-lowering operation as appropriate, so that it is possible to perform the work with the work machine **3** at a desired height.

**[0050]** The tractor **1** provided with the control unit **4** as described above controls each part of the tractor **1** (the travel machine body **2**, the work machine **3**, etc.) by the control unit **4** without a user boarding the cabin **11** and performing various operations, so that the tractor **1** can autonomously perform work while autonomously traveling in the farm field.

**[0051]** Next, an explanation is given of a configuration for acquiring information necessary for autonomous traveling. Specifically, as illustrated in FIG. **3**, etc., the tractor **1** of the present embodiment includes the positioning antenna **6**, the wireless communication antenna **48**, the front camera **56**, the rear camera **57**, the vehicle speed sensor **53**, the steering angle sensor **52**, etc. Further, in addition to the above, the tractor **1** includes an inertial measurement unit (IMU) capable of specifying the posture (roll angle, pitch angle, yaw angle) of the travel machine body **2**.

**[0052]** The positioning antenna **6** receives a signal from a positioning satellite that configures a positioning system such as a satellite positioning system (GNSS). As illustrated in FIG. **1**, the positioning antenna **6** is attached to the upper surface of the roof **5** of the cabin **11** of the tractor **1**. The positioning signal received by the positioning antenna **6** is input to the position information acquisition unit **49** illustrated in FIG. **3**, which is a position detection unit. The position information acquisition unit **49** calculates and acquires the position information of the travel machine body **2** of the tractor **1** (strictly speaking, the positioning antenna **6**) as latitude/longitude information, for example. The position information acquired by the position information acquisition unit **49** is input to the control unit **4** and utilized for autonomous traveling.

**[0053]** Note that, although a high-precision satellite positioning system utilizing the GNSS-RTK method is used in the present embodiment, the present embodiment is not limited as such, and it is also possible to use other positioning systems as long as high-precision position coordinates can be obtained. For example, a relative positioning system (DGPS) or a geosynchronous satellite navigation augmentation system (SBAS) may be used.

**[0054]** The wireless communication antenna **48** is for receiving a signal from the wireless communication terminal **46** operated by the user and for transmitting a signal to the wireless communication terminal **46**. As illustrated in FIG. **1**, the wireless communication antenna **48** is attached to the upper surface of the roof **5** provided on the cabin **11** of the tractor **1**. The signal from the wireless communication terminal **46** received by the wireless communication antenna **48** is signal-processed by the wireless communication unit **40** illustrated in FIG. **3** and then input to the control unit **4**. Further, the signal transmitted from the control unit **4**, etc., to the wireless communication terminal **46** is signal-processed by the wireless communication unit **40** and then